

Remarks/Arguments:

This is a reply to the non-final office action mailed February 8, 2005.

The claims have been revised in accordance with U.S. practice. Preferred features originally recited in claims 1 and 9 have been set out in new claims 10 - 15.

New claim 16 is a combination of claims 2 and 6.

Reconsideration of the application is request, in consideration of the following remarks.

The examiner rejected claim 1 as obvious over Pompei (US 6292685). We respectfully traverse the rejection. According to Pompei, a weighting coefficient is used for determining an internal body temperature. The weighting factor is developed on the basis of theoretical models. In particular, it includes an approximation of h/pC , e.g. a polynomial, temperature-dependent approximation. This measurement has several drawbacks. For one thing, the theoretical model may lead to erroneous results under certain conditions. Secondly, calculation of approximations using polynomial functions depending on T , T^2 and T^3 may be time consuming and may require greater computational resources.

In contradistinction, the present invention as claimed in claim 1 is directed to the use of reference data stored in the device, preferably data derived from clinical tests.

Claims 6 - 11 and 13, in particular, are directed to the use of reference data stored in lookup tables within the device.

The weighting coefficients of Pompei are constant, physical values. They are not reference data in the meaning of the present application.

The reference data are not any physical values such as the perfusion rate p , the blood specific heat C or a heat transfer coefficient. By definition they are directly derived from referential measurements.

The advantage of the present invention is that it does not need a theoretical and error-prone model which necessitates polynomial calculation for interpretation, but rather is based only upon empirical experience.

We respectfully also traverse the rejection of claims 6 and 9.

Although Figure 5 of Schuh (US 5857777) seems to show a lookup table, this table is not used for determining temperature values depending on a measured voltage.

Actually, the table only shows the principle of fixing coefficients from a calibration table. Those coefficients are used to calculate the estimated temperature values in dependence of measured voltage values. A list of coefficient values is not a lookup table as recited in claim 6, 9 or 13.

There is no hint or suggestion that Pompei (US 6292685) uses a lookup table. Pompei's coefficients are calculated by a linear or a single polynomial approximation or taken from a list, which is not a lookup table as characterized in claim 6. Pompei actually teaches away from the present invention.


Neither Pompei (US 6292685), Schuh (US 5857777), nor in any of the other documents discloses a lookup table as characterized in claim 6, combining three groups of data: (1) data relating to measured skin temperature, (2) data relating to ambient temperature and (3) data relating to values at a first body site, measured during clinical tests. A lookup table is used for "looking up" values, that is, having input values, for example a skin surface temperature and an ambient temperature, and looking up an output value, for example a temperature at a first body site. Using the

lookup table avoids the calculation of a polynomial approximation as disclosed in Pompei (column 3, lines 10-35) or Schuh (column 5, lines 17 *et seq.*)

The prior art documents calculate temperatures in dependence of measured values, a connection which can be expressed in approximated formulas, whereas the present application accesses a purely empirical relationship.

We believe that the changes made above properly distinguish the invention from the prior art, and that this application is now in condition for allowance.

Respectfully submitted,



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I certify that this correspondence is being transmitted on May 9, 2005 by facsimile to the Patent and Trademark Office at 703.872.9306.

